

Climate Change Accomplishments

Climate Change

is already changing the way that we manage water resources in California. Future impacts include loss of snowpack, higher sea level, longer dry periods, and the possibility of higher flood flows. The Department of Water Resources is acting to both adapt to changes that are already occurring, by assessing the vulnerability of the State's water supply, and to mitigate our impacts, by reducing our greenhouse gas (GHG) emissions.

DWR actions to adapt to Climate Change:

- In 2008, DWR published *Managing an Uncertain Future: Climate Change Adaptation Strategies for California's Water*. The strategies fell under four major categories: Investment, Regional, Statewide, and Improving Management and Decision Making Capacity.
- Also in 2008, DWR produced, "*Using Future Climate Projections to Support Water Resources Decision Making in California*" which the California Energy Commission released as part of the 2009 Climate Action Team report. Topics evaluated include sea level rise and impacts of climate change on operations of the State Water Project (SWP) and Central Valley Project.
- In the *California Water Plan Update 2009*, DWR used regional climate change models to help anticipate future water demand, based on projected temperature, precipitation and snowpack changes. The 2009 Update places a strong emphasis on Integrated Regional Water Management (IRWM). The Department recommends IRWM include vulnerability assessment, aggressive conservation and efficiency strategies in order to adapt to climate change, and strategies to reduce GHG by 2011.
- Developing more focused research on sea level rise will help narrow the range of uncertainty in projections of future impacts of sea level rise. In cooperation with State and federal agencies in California, Oregon, and Washington, DWR is convening a panel of the National Research Council to estimate a range of likely amounts of sea level rise through 2100. The study is expected to kick off fall 2010, and conclude by June 2012.

DWR actions to mitigate Climate Change:

- DWR was named a "Climate Action Leader" by the California Climate Action Registry (CCAR) two years in a row after reporting its total GHG emissions for 2007 and 2008. DWR earned this special recognition by calculating, disclosing, and independently verifying its GHG. DWR is in the process of having its 2009 reported emissions verified.
- Generally, over half of the power used by the State Water Project to deliver water comes from zero-carbon hydroelectricity annually.
- DWR is taking aggressive actions to reduce its carbon footprint, such as generator and pump refurbishments to increase efficiency, the inclusion of additional renewable energy into the power portfolio of the SWP and a variety of other activities.
- DWR has developed and implemented Sustainable Business Operations Initiatives in order to reduce energy and resource consumption and lower GHG emissions.

<http://www.water.ca.gov/climatechange>

